# **National Park Service**



# **Northeast Region Inventory and Monitoring Program**

# NatureBib Data Management and Data Entry Standards Manual

# **DRAFT**

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# NatureBib Data Management and Data Entry Standards Manual

# Table of Contents

Purpose of Document.
NatureBib Data Management.
Data Management Roles and Responsibilities
NPS Park Data Managers
NPS Park Staff
NPS Network Data Managers
I & M Coordinators
NatureBib Database Overview
Data Entry
Scope of Database
Data Resources and Data Mining.
Data Input Qualification
NatureBib Online Database Application.
Data Entry Procedures
Searching, Viewing, and Editing Records
Simple Search
Advanced Search
Adding Records
NatureBib Desktop Database Application
Database Procedures
Searching and Viewing
List of Figures
List of Appendices

# **List of Figures**

Figure 1: NatureBib Data Qualification Flowchart	
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# **List of Appendices**

Appendix A: National Park Service Natural Resource Database (NatureBib) Scope
Appendix B: List of NatureBib Topic Areas.
Appendix C: List of External Non-NPS Bibliographic Data Repositories
Appendix D: List of External Non-NPS Commercial Scientific Databases
Appendix E: Field-by-Field Format Guidelines for Entering New Data
Appendix F: Beta NatureBib Online Application

# **Purpose of Document**

As part of the National Park Service's (NPS) ongoing mission to provide access to and organization of information and materials of natural and cultural significance, a data management project was initiated by the NPS Inventory and Monitoring Program (I&M) to develop a Natural Resource Bibliographic Database (NatureBib) for all I&M National Parks. This document addresses specific data management and data entry standards and procedures for the online application as well as the desktop version for parks in the Northeast Region of the NPS.

# NatureBib Data Management

Data Management Roles and Responsibilities

# NPS Park Data Managers

- Populate NatureBib database with new records as they become available according to protocols and procedures detailed in this manual.
- Search internal NPS and external non-NPS resources for new bibliographic data for inclusion in NatureBib database.
- Periodically review and verify existing NatureBib data for uniformity, duplication, accuracy, and quality, then edit data as needed.
- Facilitate access to NatureBib database to interested NPS park staff and cooperators.
- Provide NatureBib training to interested NPS park staff on an as-needed basis.
- Inform NER NPSpecies Data Manager concerning relevant species information found in NatureBib documents for inclusion in NPSpecies database.
- Generate NatureBib reports and/or bibliographies for NPS personnel on an asneeded basis.

### NPS Park Staff

- Provide NPS Park Data Managers with relevant new bibliographic data as it becomes available for inclusion into NatureBib database.
- Periodically assist in the review and verification of existing NatureBib records for accuracy, quality, and relevance.

### NPS Network Data Managers

- Provide NPS Park Data Managers with new relevant bibliographic data as it becomes available for inclusion into NatureBib database.
- Periodically oversee the review and verification of existing NatureBib records for accuracy, quality, and relevance.

# I & M Coordinators

• Provide NPS Park Data Managers with new bibliographic data as it becomes available from cooperators for inclusion into NatureBib database.

### **NatureBib Database Overview**

Data Entry

# Scope of Database

The NatureBib database bibliographically describes all relevant natural resource media including reports, published and unpublished, books, book chapters, data sets, maps, correspondence, journal articles, conference proceedings, dissertations, as well as other formats such as photos, slides, and museum specimen collections, which contain park-specific natural resource information. The database is populated with citations each of which includes standard bibliographic data (author, title, publication information, work length, packaging type, notes), an abstract, keywords, and specific storage location and holdings information. Also included with each bibliographic citation are NatureBibspecific data such as citation status, creation, sensitivity, and legacy information, as well as an unique Bibkey ID number.

As for the subject scope of the database, NatureBib includes all the aforementioned media related to the natural resources of each specific NPS unit. In a general sense for the purposes of NatureBib, "natural resources" includes flora, fauna, soil, air, water, rocks, and activities that affect them, such as mining, grazing, polluting, logging, and recreation (See Appendix A, *National Park Service Natural Resource Database (NatureBib) Scope*, and Appendix B, *List of NatureBib Topic Areas*, for a further description of the subject and media scope of NatureBib). The database began as a desktop application only and is now primarily an online web-based application with a secondary desktop application for use at parks.

# Data Resources and Data Mining

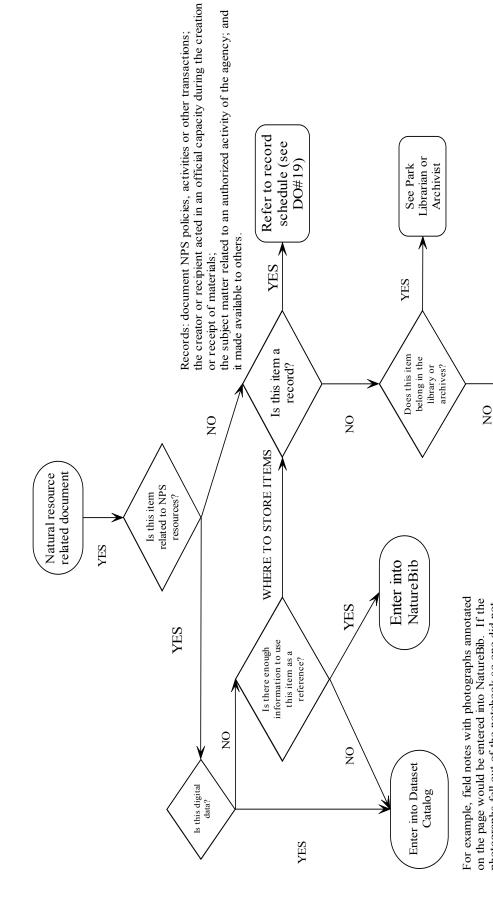
When populating the NatureBib database natural resource data are found primarily through internal NPS sources. These include Park Natural Resource Offices, Park Administration Offices, Park Libraries, NPS Network Offices, NPS Support Office Files, NPS park and service-wide databases, NPS Cooperators. Another productive source for populating the NatureBib database are external non-NPS resources. These include Federal, State, and Local Government collections and databases, University collections and databases, and Commercial Scientific Research databases, non-NPS Researchers (See Appendix C, List of External Non-NPS Bibliographic Data Repositories, and Appendix D, List of External Non-NPS Commercial Scientific Databases).

# Data Input Qualification

After data mining for NatureBib records, there are a number of criteria to consider before entering a new record into the database. The following flowchart graphically outlines the initial subject/format qualification process for new bibliographic data input.

Figure 1: NatureBib Data Qualification Flowchart (Created by Wendy Schumacher, NPS NatureBib Coordinator)

# Does this item belong in NatureBIB?



Maintain as convenient

photographs fell out of the notebook so one did not know which photo goes with which annotation then use Dataset Catalog (a part of NR/GIS Metadata System).

Once the new bibliographic data meets the initial data input qualification criteria (outlined in the previous flowchart) and before actually entering the new data into the NatureBib database, make sure the data represents <u>unique</u> bibliographic data input. To avoid data duplication, search the database comprehensively by conducting different types of searches using different search strategies (i.e. simple and/or advanced searches by author, or title, or author and title, or author and date, or title and date, or author and park, or title and park, etc.). Always conduct more than one of these searches before entering any new data so as to ensure that the data to be entered does not already appear in the database and is thereby unique bibliographic data.

Now that the data has met both the initial input qualification criteria and searches have been conducted to verify it as unique, it must now, when entered into the database, conform to the NatureBib bibliographic format standards established for each field. These data input field format standards are detailed, with examples, in Appendix E, *Field-by-Field Format Guidelines for Entering New Data*. Finally, once bibliographic data is entered into a new NatureBib record there are some very basic, yet important, quality control steps to follow before submitting it to the database:

- Confirm that the data has been entered into the correct workform. In most cases the workform should be obvious (i.e. book, book chapter, conference proceedings, data set, journal article, correspondence, map, report [published or unpublished], thesis/ dissertation). In the case of bibliographic data that does not correspond with any of these workforms (i.e. photos, slides, specimen collections, etc.) enter the relevant bibliographic data into the *Other* materials workform.
- Include as much specific bibliographic data in the record as can be taken from the original document. The more specific bibliographic data that is entered, the greater the likelihood there will be in finding that specific record in future searches.
- Examine the new bibliographic data thoroughly for spelling and punctuation errors. Spelling and/or punctuation errors can significantly effect future searches and the accurate retrieval of desired records.
- In the *Keywords* field enter only the most relevant keywords that accurately describe the subject of the document. Entering only the most specific keywords will provide the most direct access to the record when searching the database. Too many keywords will group the record in a much larger retrieval list when searching. Too few keywords will cause the record to be "lost" in searches.
- Review each field to confirm that data has been entered properly, but especially examine the *Author* field to confirm its format. Along with the *Title* field, the *Author* field is the most common criteria used when searching the database. See if the author(s) to be entered have already been input into the database and, if necessary, conform to the existing data input to ensure database uniformity.

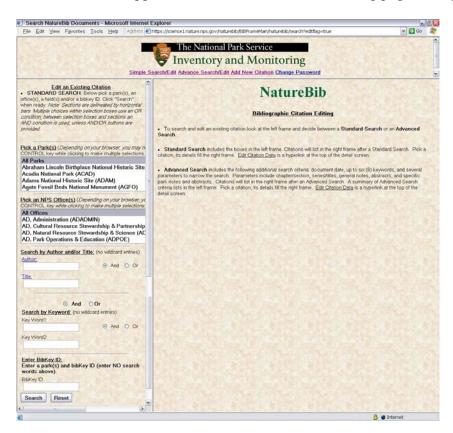
# **NatureBib Online Database Application**

**Data Entry Procedures** 

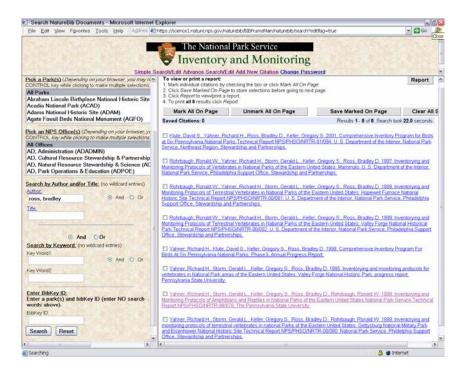
Searching, Viewing and Editing Records

# Simple Search

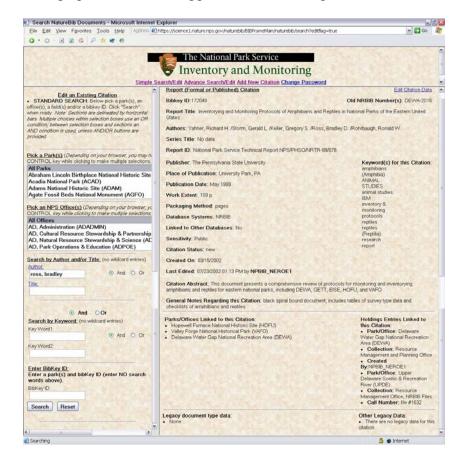
As mentioned, before entering new bibliographic data searches should be conducted in order to verify that the data to be entered is unique. Once in NatureBib click on *Simple Search/Edit* in the upper window frame and the following page will appear:



From this page simple searches can be conducted by typing a search strategy into the available fields in the left window frame. Simple searches can utilize any combination of the available fields shown (*Park, Office, Author, Title, Keyword,* or *BibKey ID*) in any combination of "and/or" qualifiers. In the following example, a simple search for the author Bradley Ross was conducted, written in the Author field as "Ross, Bradley".



After hitting *Search*, the search is conducted and the results are presented in the lower right window frame. To view any record in the list click on the record citation and a complete bibliographic record will appear in the lower right window frame.



To edit records in the database, select from the *Edit Citation Data* for the upper right corner of the search result window (previous screen shot). In doing so, the following window will appear:



Data in any of the existing record fields can now be edited by either clicking on a link to edit the existing data, clicking on a button to add new data, or by typing/erasing existing data in text boxes.

**IMPORTANT NOTE:** It is strongly recommended that only one person at any given park, preferably the NPS Park Data Manager, should have editorial authority. Existing data should only be edited if there is a significant reason for doing so such as the addition of more specific bibliographic data, serious spelling and/or punctuation errors to be corrected, or author/title clarification and revision.

### Advanced Search

In some cases in order to confirm that new bibliographic data is unique, an *Advanced Search* should be conducted. First click on the *Advanced Search/Edit* link in the upper window frame and the following screen will appear:

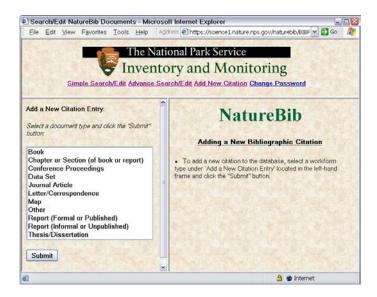


In this window a much more complex search strategy can be created allowing for a more accurate rate of data retrieval. Advanced searches can utilize any combination of the available fields shown by either selecting search options from pull down menus (*Park, Office, Document Type, Database,* or *Topic* Area) or by typing search options into text boxes (*Author, Title, Keyword, Year,* or selected search criteria) again in any combination of "and/or" qualifiers. It is always a good practice to search using both a *Simple Search* and *Advanced Search* when attempting to verify unique bibliographic data.

### Adding Records

When adding new bibliographic data to the NatureBib database is strongly recommended that data entered via the online application instead of the desktop application. This allows for a more timely and current bibliographic data set. When

adding new bibliographic data first click on the *Add New Citation* link in the top window frame. The following screen will appear:

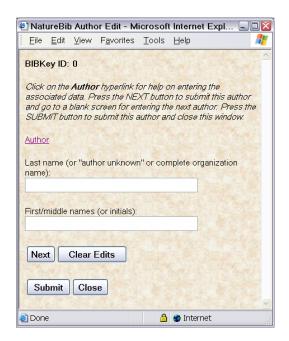


In the lower left window select the appropriate workform and click *Submit* and a new workform will appear. In this example the *Report (Formal or Published)*, was selected and the following screen appears:

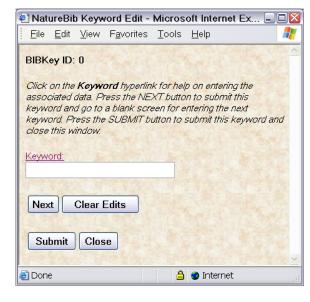


Data can now be entered in any of the existing record fields by either clicking on a button (that open up specific field text boxes or data lists) to add new data as found in the lower left window frame, or by typing new bibliographic data into text boxes or selecting data from scrolling lists as found in the lower right window frame. Examples of specific field text boxes or text lists that appear when clicking buttons in the lower left window screen are as follows:

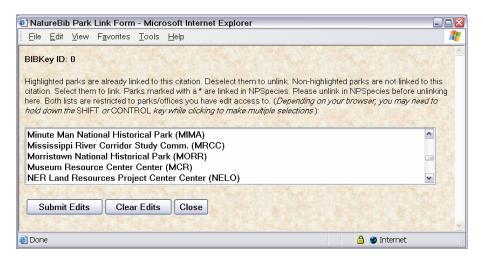
# Adding New Author Data



Adding New Keyword Data



Linking Park Data



# NatureBib Holdings Edit - Microsoft Internet Explorer <u>File Edit View Favorites Tools Help</u> BIBKey ID: 0 Click on any field name hyperlink for help on entering the associated data. Press the NEXT button to submit this holdings entry and go to a blank screen for entering the next one. Press the SUBMIT button to submit this holdings entry and close this window. Select the park or office for this holdings entry. List is restricted to parks/offices you have edit access to: ~ Acadia National Park (ACAD) File Code Call Number: ANCS+ Location Clear Edits Next Submit Close

# Adding Park Holdings Data

Once all relevant new bibliographic data has been entered into the workform click on the *Submit Edits* button on the original new workform screen to save the record into NatureBib.

A internet

# **NatureBib Desktop Database Application**

**Database Procedures** 

Done

# Searching and Viewing Records

When working with the MS Access-based desktop version of NatureBib, the bibliographic data set for searching and viewing records will usually be the data set for a given park only. The desktop version allows parks the opportunity to search and view records from their own bibliographic data set without having to search through the much larger bibliographic data set online that encompasses all I&M parks. As for editing records in the desktop version, it is strongly recommended that all editing, as well as adding records, be done via the online database.

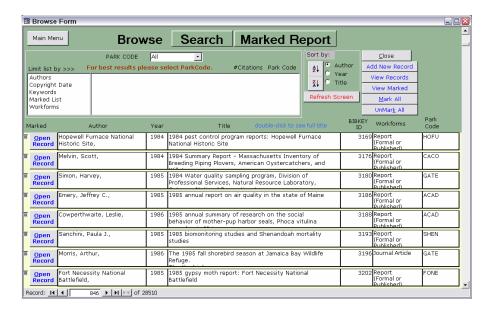
When opening the desktop version, from the opening window select *Tools* to link to the appropriate bibliographic data set.



From the *Tools* menu screen find the appropriate bibliographic data set by browsing and click *Link Files* to open the database



Now back on the opening window screen select *Browse* and the following window will appear:



All the records in the database will appear in the lower scrollable list at the bottom of the screen and available *Quick Search* options will appear in the upper frame (*Authors, Titles, Copyright Date, Keywords, Marked List,* and *Workforms*). By selecting any of these *Quick Search* options a scrollable list of those field will be displayed in the upper center text box. To view any record, click on the *Open Record* button beside the record citation in the lower scrollable list.

To search the database, click on the *Search* button at the top of the screen and the following window appears:



From the pull down field lists at the top of the window a search strategy can be constructed by entering data to be search in specific fields in the text boxes immediately to the right of each pull down field list. These search option can then be linked with "and/or" qualifiers. Once a search strategy is constructed click the *Run* button and the search is conducted and the results appear in a scrollable list of record citation in the lower half of the window.

# Appendix A: National Park Service Natural Resource Database (NatureBib) Scope (Compiled from Marilyn Ostergren, former NPS NatureBib Coordinator)

# Subject scope of materials to be included:

"All materials related to the natural resources of the park/monument/historic site"

"natural resources": flora, fauna, soil, air, water rocks, and activities that affect them (i.e. mining, grazing, air or water pollutants, logging, farming, recreational activities...).

"related to the park": resources within the park itself, or within the region (the region will vary, for example, the region for mammals/birds/plants may be the valley or forest the park is in, while the region for geology might be a larger area which may include a given rock formation).

# Format scope of materials to be included:

"Include any and all documents that convey significant and relevant information"

"all documents": reports, published and unpublished, books, book chapters, data sets, maps, correspondence, journal articles, conference proceedings, dissertations, as well as other formats such as photos, slides, and museum specimen collections.

# Scope of materials not to be included:

Geographically, documents which cover a very large region that goes well beyond the park (i.e. the entire state), unless there is a section specific to the park, or entries in the document for the park.

Documents which generally describe a resource of the park (i.e. a certain animal that lives there), but it isn't clear as to a specific location.

Documents which are for the general public and contain no potentially new information (i.e. general subject matter that would be contained in documents such as newspaper articles, pamphlets, popular magazine articles, field guides, etc). Documents should reflect a research-level orientation.

NatureBib <u>is not</u> intended to be an inventory of the park's library collection, instead this database should only contain park-specific natural resource. To find more general information they can consult the park's library or other larger library collections. There are a lot of gray areas. Lean on the side of including documents if they seem relevant. Be especially generous with unpublished materials that may not exist anywhere else, and more stingy with published material that can be found in a typical university or public library collection.

# **Appendix B: List of NatureBib Topic Areas**

(Compiled from NatureBib Website)

Agriculture Air Quantity **Animal Studies** Archeology Atmospheric Studies **Birds** 

Cave (Flora/Fauna) Cave (Karst)

Climatology Coastal-Marine Systems

Contaminants/Hazardous Materials Database/Information Systems

**Erosion-Sedimentation** Ethnology

Exotic/Invasive Species-Animals Exotic/Invasive Species-Plants

Fire

Fisheries Management Flood Management/History

Forestry Geology Geomorphology Geophysics

Glaciology GIS

Hydrology (General) Hydrology (Surface) I&M **Integrated Pest Management** 

Invertebrates Inventory Limnology Mammals

Management Management/Administration Microbiology Minerals Management Monitoring Night Sky/Light Pollution

Non-Vascular Plants Oceanography Other Paleontology Petrology/Mineralogy **Physical Sciences** Plant Communities Plant Studies

Range Management Recreation/Aesthetics Reptiles Restoration-Cultural

Restoration-Natural Sedimentology/Stratigraphy

Sociology Soil Sciences Soundscape **Tectonics** Threatened-Endangered-Sensitive Animals **Visitor Impacts** Volcanology/Geothermal Water Quality

Water Rights Watershed Management Wildlife Management Wetland/Riparian

# **Appendix C: List of External Non-NPS Bibliographic Data Repositories**

# Bureau of Land Management Library (<a href="http://207.67.203.45/b10109/">http://207.67.203.45/b10109/</a>)

The BLM Library has over 40,000 volumes and over 250 periodical subscriptions in its collection. These materials cover all aspects of land management, natural resources, minerals, computer science, and administration.

# Conserve Online [The Nature Conservancy] (<a href="http://www.conserveonline.org/">http://www.conserveonline.org/</a>)

ConserveOnline is an online library of documents pertaining to conservation science and practice. This site also has discussion groups, maps and spatial data, and provides access to large repositories of conservation information housed at other organizations.

# EPA Headquarters Library (<a href="http://www.epa.gov/natlibra/ols.htm">http://www.epa.gov/natlibra/ols.htm</a>)

OLS is the Online Library System for the Library Network of the United States Environmental Protection Agency. It consists of several related databases that can be used to locate books, reports, and audiovisual materials on a variety of topics.

# GrayLit Network (<a href="http://www.osti.gov/graylit">http://www.osti.gov/graylit</a>)

The GrayLIT Network is the world's most comprehensive portal to U.S. Federal gray literature.

# Library of Congress (<a href="http://catalog.loc.gov/">http://catalog.loc.gov/</a>)

The Library of Congress Online Catalog contains approximately 12 million records representing books, serials, computer files, manuscripts, cartographic materials, music, sound recordings, and visual materials.

# NOAA Central Library (http://www.lib.noaa.gov/)

Online library catalog of the NOAA research collection with a comprehensive coverage of hydrographic surveying (from 1820), oceanography, meteorology, hydrology (from 1870), living marine resources (from 1970 with selected coverage from 1870), and meteorological satellite applications (from 1960).

# National Agricultural Library [AGRICOLA] (<a href="http://agricola.nal.usda.gov/">http://agricola.nal.usda.gov/</a>)

AGRICOLA (AGRICultural OnLine Access) is a bibliographic database of citations to the agricultural literature created by the National Agricultural Library (NAL) and its cooperators. The database covers all aspects of agriculture and allied disciplines, including animal and veterinary sciences, entomology, plant sciences, forestry, aquaculture and fisheries, farming and farming systems, agricultural economics, extension and education, food and human nutrition, and earth and environmental sciences.

# National Technical Information Service (http://www.ntis.gov/search/index.asp?loc=3-0-0)

The National Technical Information Service (NTIS) is the largest central source for U.S. government-sponsored scientific, technical, engineering, and related business information. NTIS has over 3 million information titles in its collection.

# Smithsonian Institution Libraries (<a href="http://siris-libraries.si.edu/#focus">http://siris-libraries.si.edu/#focus</a>)

The Smithsonian Institution Libraries unites 20 libraries into one system supported by an online catalog of the combined collections. It maintains publication exchanges with more than 4,000 institutions worldwide that supply Smithsonian scientists and curators with current periodicals, exhibition catalogs, and professional society publications.

# U.S. Army Corps of Engineers Library (<a href="http://lepac1.brodart.com/search/um/">http://lepac1.brodart.com/search/um/</a>)

CELIO (Corps of Engineers Library Information Online) is the database/electronic catalog representing the collections of all the libraries within the U.S. Army Corps of Engineers. They are located throughout the United States. You may search the collective database or the collection of one specific library.

# U.S. Department of the Interior Library (<a href="http://library.doi.gov/">http://library.doi.gov/</a>)

The U.S. Department of the Interior Library has collections centered on documents produced by or for the Department, as well as a broad range of related books, journals, and other resources that support the Department's efforts to protect and provide access to the Nation's natural and cultural heritage.

# U.S. Fish and Wildlife Service,

National Conservation Training Center Conservation Library (<a href="http://library.fws.gov/">http://library.fws.gov/</a>)

Online access to the U.S. Fish and Wildlife Service 's National Conservation Training Center library which collects natural resource materials concerning the conservation of fish, wildlife, plants, and their habitats.

# U.S. Forest Service Library (<a href="http://sirsi.fs.fed.us/uhtbin/webcat">http://sirsi.fs.fed.us/uhtbin/webcat</a>)

The U.S. Forest Service's online catalog contains over 190,000 records of natural resources literature, over 55,000 records and links to Forest Service Research publications dating back to 1904, over 11,000 records for other Forest Service publications, and over 6,700 links to full-text publications.

# U.S. Geological Survey Library (<a href="http://library.usgs.gov/">http://library.usgs.gov/</a>)

The U.S. Geological Survey (USGS) Library is the largest library for earth sciences in the world. The library system includes four libraries which comprise over one million books and journals, 450,000 maps, 370,000 microforms, 270,000 pamphlets, 250,000 black-and-white photographs, 50,000 color transparencies, 15,000 field record notebooks, and 250 videocassettes. Materials include USGS publications as well as those produced by state and foreign geological surveys, scientific societies, museums, academic institutions, and government scientific agencies.

University Catalogs [via Library of Congress] (<a href="http://lcweb.loc.gov/z3950/gateway.html">http://lcweb.loc.gov/z3950/gateway.html</a>)

Provided via the Library of Congress' Z39.50 Gateway, this is an extensive list of over 500 links to national and international university, research, public, and government library catalogs.

# **Appendix D: List of External Non-NPS Commercial Scientific Databases**

# AGRICOLA (agriculture & related sciences)

Covers agriculture and related subjects including animal and plant science, entomology, agronomy, horticulture, rural sociology, agricultural economics, family living, food and nutrition.

# AMS E-Journals (meteorology)

Full text access to the American Meteorological Society Journals Online. Coverage is from 1997 to the present.

# Annual Review of Anthropology

Annual Reviews provides access to critical review articles that synthesize primary research literature in Anthropology. The database contains full-text articles from 1996-present and tables of contents for 1984-1995.

# Anthropological Literature

Historic and current anthropology and related disciplines including geography, art, genetics, ethnohistory, religion, folklore, psychology, archaeology, and demography.

### Aquatic Sciences Fisheries Abstracts

The Aquatic Sciences Collection provides comprehensive information on the science and technology of marine, freshwater, and brackish water organisms and environments from 1978 to the present.

### **Biological Abstracts**

Biological Abstracts is the premier database for the biological sciences and includes information on biochemistry, microbiology, human biology, physiology, botany and zoology.

# Biological and Agricultural Index

This index cites articles from more than 240 English-language periodicals published in the United States and elsewhere. Periodical coverage includes a wide range of scientific journals, from popular to professional that pertain to biology and agriculture.

# Cambridge Scientific Abstracts

CAB Abstracts covers research and development literature in the fields of agriculture, forestry, aspects of human health, human nutrition and food science, animal health and the management and conservation of natural resources

### Dissertation Abstracts

Dissertation Abstracts is the primary source for 1.4 million doctoral dissertations (and selected master's theses) from over 1000 North American and European universities.

Elsevier ScienceDirect (full text journal articles)

This system provides access to the electronic versions of the Elsevier journals. Currently, it includes more than 1,200 journals. The full text collection contains over 1.5 million articles from 1995 to present across all fields of science.

# **Environmental Sciences Pollution Management**

The Environmental Sciences Collection provides abstracts and references to the literature covering all areas of air, land, water, and noise pollution as well as bacteriology, ecology, toxicology, risk assessment, environmental engineering, environmental biotechnology, waste management, and water resources from 1981 to the present.

# **GEOBASE**

GEOBASE contains citations and abstracts to worldwide literature on geography, geology, ecology, international development, energy, hydrology and related disciplines.

# GeoRef (geoscience literature)

Provides access to the geoscience literature of the world. GeoRef contains over 2 million references to geoscience journal articles, books, maps, conference papers, reports, theses and dissertations.

# Meteorological and Geoastrophysical Abstracts

Provides international access to the world's meteorological and climatological literature, including atmospheric chemistry and physics, physical oceanography, hydrology, glaciology, and related environmental sciences. Indexes articles, book chapters, and conference proceedings.

### Oceanic Abstracts

Oceanic Abstracts is focused exclusively on worldwide technical literature pertaining to the marine and brackish-water environment.

### Pollution Abstracts

Covers scientific research relating to all forms of pollution, including air, waste, radioactive material and toxic emissions, as well as land and noise.

### Science Citation Index (SCI)

Provides access to articles from over 3,200 journals in all areas of the sciences and technology. SCI also includes reviews, letters, and other document types.

### Springer-Verlag Journals (full text science articles)

Springer-Verlag. Journals cover the fields of chemistry, economics, engineering, environmental sciences, geosciences, life sciences, mathematics, medicine, and physics.

### Water Resources Abstracts

Provides summaries of the world's technical and scientific literature on water-related topics covering characteristics, conservation, control, pollution, treatment, use and management of water resources.

Appendix E: Field-by-Field Format Guidelines for Entering New Data (Compiled by Nicole Jackelen and Wendy Schumacher, NPS Bibliographic Coordinator)

### **Abstract**

Enter a brief description of the content of the document that will help a user determine its usefulness. Avoid copying journal abstracts or prefaces verbatim. Focus instead on interesting points, and attempt to summarize and/or interpret the contents by providing answers to questions such as "who," "what," "where," "when," "why," and "how." Sensitive citations can have descriptive content information without compromising the sensitivity level of the document. Be specific. For example, mention that the article contains nest locations without revealing their exact positions in the abstract.

# Author

### Personal Author

Provide the *Lastname* in the last name field, *Firstname* and Middle Initial, if available, in the first name field. Avoid use of diacritical marks such as umlauts, slashes, and accents. If the author is not known, enter *author unknown* in the last name field. Type the first character of each name in upper case and all other characters in lower case. Put a period after each initial. Do not include prefixes such as "Mr.," "Mrs.," or "Dr."

For example:

Tucker, Marianne Mech, L.D. Alders, Alexander G.J. Cooper-Smith, Montgomery P.

# Corporate Author

Enter the name of the corporate author in direct order in the last name field.

For example:

National Park Service U.S. Forest Products Laboratory Colorado State University Department of Agriculture, National Forest Service National Geographic

Use abbreviations for "United States" (US), but not for individual states. Do not write US if the author is clearly a Federal entity.

For example:
National Park Service
US Environmental Protection Agency
Ohio Environmental Protection Agency

*NOTE* that the Map workform uses the term "Cartographer" in place of Author. *NOTE* that Author is used for the author of the letter or correspondence in the Letter workform.

*NOTE* that an unlimited number of authors may be entered in either application.

# **Citation Origin**

The Citation Origin enables searching by a particular area or subject specialty. Since NatureBib is comprised of several natural resource-related bibliographies the Citation Origin gives a subject area expert a place to put their citation in the event that there was a split of databases. Select the Database System(s) from which this Citation Originates from the list provided.

For example:

ARBIB Air Resources Bibliography CRBIB\* Cultural Resources Bibliography DEERBIB Deer Bibliography GRBIB Geologic Resources Bibliography NRBIB Natural Resources Bibliography

OTHERBIB Used to compile citation information that falls out of the domain of the other bibliographies.

PALEOBIB Paleontology Bibliography WRBIB\*\* Water Resources Bibliography

*NOTE* \*CRBIB is temporarily available through NatureBib. When CRBIB is accessible a download of the CRBIB citations in NatureBib will be exported.

*NOTE* \*\*WRBIB is maintained separately, and data is uploaded periodically.

# **Date Of Copyright**

Enter the four digit Copyright date as it appears on the referenced work.

For example:

2001 1967 Citations are sorted by the four digit date. Leave this field empty if the Copyright date cannot be ascertained.

# **Date Of Meeting**

Used for the date that a meeting or conference was held. Enter complete dates, including month, day, and four digit year if available. Enter the date as it appears on the work.

For example:

January 1, 2001. 1926 Nov 1984

Use a question mark (?) to enter an unknown date.

For example:

August-September 195? Fall 19?? March 2, 1936?

Enter date ranges with a hyphen.

For example:

February 26, 1979-March 1, 1979 June 19-24, 1998 Sep-Oct 1988 Summer 1946

### **Date Of Publication**

Enter complete dates, including month, day, and four digit year if available. Enter the date as it appears on the work.

For example:

January 1, 2001. 1926 Nov 1984

Use a question mark (?) to enter an unknown date.

For example:

195? August 19?? 1936? Enter date ranges with a hyphen. For example: February 26, 1979-March 1, 1979 Sep-Oct 1988 Summer 1946

*NOTE* that "Date" in the Letter workform refers to the date that the letter was written.

# Edition, CODEN, Series Volume ID, Author Affiliation, ISSN, ISBN

Enter unique identification information for published works.

For example:

### **Edition**

Used for identification of a different form or version of a title. It can also reference an item number. Enter the information as it appears on the referenced work.

2nd ed. Reprint of 1932 1st version 7.0 Research Monograph No. 3

### **CODEN**

CODEN is a unique and permanent alphanumeric code assigned by the Chemical Abstracts Service for the identification of scientific and technical serial titles. Enter the code as it appears on the work.

For example:

GRANR8 SSTEAU

### Series Volume ID

The primary designation used by the publisher to identify a series.

For example:

A Fur Trade Series Empire State Historic Publications Series No. 66 Technical Report Series No. 20 Series No. 736

# **Author Affiliation**

Used for the name of the organization or corporate body, including department or division, where the author was located when the work was created. This can include city, state, and country.

For example:

University of Nevada System, Desert Research Institute, Center for Water Resources Research
Information Technology, IBM, Minneapolis, MN
State of Wisconsin, Dept of Health and Family Services, Madison, WI

### **ISSN**

The International Standard Serial Number (ISSN) provides unique identification of serial publications. Enter the ISSN as it appears on the work.

For example:

0012-6743

# **ISBN**

The International Standard Book Number (ISBN) provides unique identification of the published item, the publisher, and the country of publication. Enter the ISBN as it appears on the work.

For example:

0-12-673450-3

### **Extent Of Work**

Used in conjunction with Packaging Method. Enter the numeric part of the physical description of the size of the referenced work. The remaining information such as "pages," "leaves," "cassettes," etc. is entered in the Packaging Method field. If you need to include more than one physical form, include additional extent and packaging methods

after the first one, supplying necessary punctuation. [This is shown in the example for Packaging Method]

For example:

In "vii, 229 p." the "vii, 229" is the Extent of Work, and the "p" is the Packaging Method. In "16 leaves", the "16" is the Extent of Work, and the "leaves" is the Packaging Method.

### **Issue Identification**

Used to identify subunits of information for the Volume identification field.

For example:

In "North American Indian trade silver, volume I, part 2" "North American Indian trade silver" is considered the Title, "volume I" is considered the Volume, and "part 2" is considered the Issue.

In "Journal of Sedimentary Petrology 6(4):46-53" "6" is the Volume number, "4" is the Issue number, and "46-53" is the page range.

For maps the issue identification is the alphanumeric following the series name. In U.S. Geological Survey Geologic Quadrangle Map GQ-1544 "GQ-1544" is the Issue Identification.

Additional examples include:

5, Serial No. 67 5, Pt. 3 Suppl. 7 No. 2 Sheets 9-11

# Keyword

Enter identification terms, keywords, or phrases that describe the subject content of the referenced work.

For example:

Dredged material Dredging

Certain topics such as geographical areas warrant the use of greater specificity and/or local terminology to aid in information retrieval. In such instances enter park related or park specific terms and/or keywords.

For example:

An article about the Cades Cove area in Great Smoky Mountains National Park may include the keywords "Cades Cove." Do not include information available elsewhere from picklists like park name, parkcode and workform.

*NOTE* that asterisk (\*) wildcard searching enables users to search for variations on words by finding words with differences on several letters at the beginning or end of a word.

For example

:

*NOTE* that an unlimited number of keywords may be entered in either application.

# Language

Enter the language in which the referenced work was written.

For example:

Sanscrit English Mandarin

# **Larger Work Citation**

Larger work citation refers to the bibkey\_id of the work for which the map or dataset supports. This is a numeric field.

### Location

Enter the Storage Location, Call Number, Collection, File Code, and ANCS+ number for the referenced work.

<sup>&</sup>quot;grass\*" will retreive all records containing the words grass, grasses, grassland, grasslands, etc.

<sup>&</sup>quot;\*and" will retrieve all records with words like sand, land, and band.

For example:

### Location

Enter detailed, descriptive information pertaining to the physical location of the item:

### Call Number

Enter call numbers if available, including any phrases:

Y 12.Sci2 667.3 BER HB66.2 1983

### Collection

Enter information to establish association or connection to a larger collection if available:

"Science and technology"
"Audio-visual"

### Park Code

Enter the park code or office code from the pull down menu signifying at which park this copy is being held.

# File Code

Enter the file code from Director's Order #19, Appendix B or General Records Schedule.

### ANCS+

Enter the cataloging number from ANCS+ for cross-reference.

# **Packaging Method**

Used in conjunction with Extent of Work. Select the material form in which the information is presented from the list provided.

<sup>&</sup>quot;resource management files, file cabinet A, third drawer, folder 'Visitation'"

<sup>&</sup>quot;wildlife biologist's office, stack of papers labeled 'Tree frogs'"

<sup>&</sup>quot;general stacks, oversize, section 'Air quality'"

For example:

In "342 negatives", "342" is the Extent of Work, and "negatives" is the Packaging Method.

*NOTE* Do not capitalize the first letter. Forms may be abbreviated for simplicity.

For example:

pages, or pp. negatives, or negs. transparencies, or trans. cassettes, or cass. sheets slides videotapes

If you need to include more than one physical form, include additional extent and packaging methods after the first one, supplying necessary punctuation.

For example, the entries for 1 videotape; 289 pages" would be:

Extent of Work 1 Packaging Method videotape, 289 pages

Include information about accompanying material if applicable.

For example:

Extent of Work 2

Packaging Method cassettes. Accompanied by: 1 booklet.

# **Pages**

Enter the page number or range of pages for individual chapters, sections, journal articles, etc. Enter full page numbers.

For example:

210-213

195

96-114

### Park Code

Select the appropriate Park or Office Code from the list provided. This should be the park or office code about which this document relates. Enter the park or office code for holdings or location in the LOCATION field.

*NOTE* that an unlimited number of park/office codes may be entered in either application.

# **Place Of Meeting**

Used for the location of a meeting, conference, etc. Enter the city and state or country where the meeting was held.

For example:

Denver, CO Cardiff, Wales Denali National Park and Preserve, Denali, AK

# **Place Of Publication**

Enter the city or the place where a work was created. If the city is not well known or is found in more than one country include the state or country.

For example:

Seattle Toronto Cambridge, MA Cambridge, England

In cases of unpublished material, enter as much information as possible, including the city and state where applicable.

For example:

Abraham Lincoln Birthplace National Historic Site, Hodgenville, KY San Diego State University, San Diego

# **Publisher Name**

Enter the name of the individual, organization, or university responsible for making the work available to the public.

For example:

Charles Scribner & Sons
Goddard College
Yale University Press
University of Kentucky, School of Engineering
National Geographic

Leave this field blank if there is no indication of the organization responsible for producing the document.

### Notes

Used for personal notes or comments, including phrases that provide uniqueness or clarity, or to identify related works. Enter information here that doesn't fit any other field.

For example:

"Contract number NPS-900X"

"Contracts CX 8000-4-0031 & CX 8000-6-0034"

"Contribution No. CPSU/UNLV 008/11"

"There is no publication date on this document but it makes reference to fieldwork conducted in 1981."

"This is number 28 of 100 titles published."

"This is Vol. I Great Plains"

"Title name change: from Contributions to Geology (vol. 1, no. 1-vol. 32, no. 2) to Rocky Mountain Geology"

"Cover title"

# **Report Identification**

Enter the complete alphanumeric code that uniquely identifies the report.

For example:

CR987X GSA Special Paper No. 21 Technical Report NPS/MAR/NRTR-92/053 Bulletin No. 47

# **Reproduction Ratio**

Used for Maps. Enter the ratio of the map scale.

*For example:* 

1:500000 1"=1 mile

### Sensitive

Enter the sensitivity level for the referenced work by indicating whether it can be viewed by the public, if it should be limited to National Park Service staff, or if it should be restricted to an individual park or office.

3 as Public access 2 as NPS staff only 1 as individual Park

*NOTE* that the Sensitivity Level of anything in the public domain, such as journals and books, is a "3."

*NOTE* that the default is Public access or "3."

# **Series Name**

Used for Maps. Indicate whether the referenced work is part of a series. Enter the uniform title and/or numbering used by the publisher.

For example:

Georgia Topographic Series Birds of Rocky Mountain National Park, no. 7 series 7

### Size

Enter the physical dimensions, format or duration of the referenced work.

For example:

16 mm.

28 cm.

2x2 in.

90-minutes

44x44 in. 96x48 cm

### Title

Enter titles in "sentence style," which means that only the first word of the title (and subtitle) and proper nouns are capitalized. Field size is limited to 250 characters so addition title information should be put in the General Notes field.

For example:

101 uses for mushrooms Tennessee state trails and waterways Wilderness and the American mind

Include any parallel or subordinate title following a colon. Enter characters such as a semicolon or comma as they appear in the title.

For example:

The unsettling of America: Culture & agriculture

Plants of Samoa: A guide to their local and scientific names with authorities; with notes on their uses, domestic, traditional and economic

If more than one title appears (i.e. a book in a series, a chapter in a book, a conference paper or journal article, etc.) see the following examples:

Book title: The American lakes series

Series title: Lake Superior

Proceedings title: Proceedings of the Gulf and Caribbean Fisheries Institute Paper title: Status report of Florida's research on spiny lobster biology

Journal title: National Parks & Conservation Magazine Article title: Agate fossil beds: A page from the past

In the Letter workform, the Title is used for the subject line of the correspondence, or the recipient (individual or group) of the communiqué.

For example:

Guadalupe Mountains National Park employees

Alexander Meyer, Park Technician, Acadia National Park

Public Notice: To Whom It May Concern

Zebra Mussel Conservation Partnership Members

Planning meeting of the TRNP bighorn sheep natural resource preservation program initiative

# **Topic Areas**

Select the Topic Areas that apply to the referenced work from the list provided. This field links the Investigator's Annual Report to NatureBib and should only be populated by the park Permit Coordinator.

*NOTE* that Topic Areas can be used in conjunction with Keywords to potentially narrow or expand the search.

For example:

Information concerning "peregrine falcons" may include the Topic Area "Birds," which would retrieve records pertaining to all birds, as well as the Keyword "peregrine falcon (Falcon peregrinus)," which would retrieve only those records relating to that bird. http://www.nature.nps.gov/nrbib/ - top

# **URL Of Online Document**

Enter the Uniform Resource Locator (URL), also called an "address," and date accessed for an electronic copy of the work.

For example:

http://www.nature.nps.gov (accessed January 6, 2004) http://www.nature.nps.gov/nrbib/ - top

### **Volume Identification**

Enter the primary designation used by the publisher to identify the units of the work.

*For example:* 

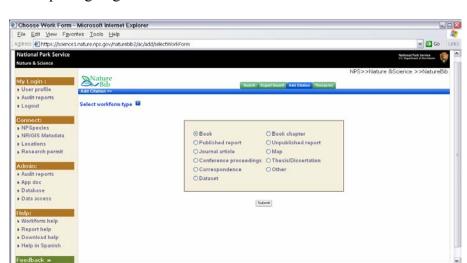
In "North American Indian trade silver, volumes I and II" "North American Indian trade silver" is considered the Title, and "volumes I and II" is considered the Volume. In "Journal of Sedimentary Petrology 6(4):46-53" "6" is the Volume number, "4" is the Issue number, and "46-53" is the page range.

Additional examples include:

pt. 2 vol. II III 1st vignette sheet 7

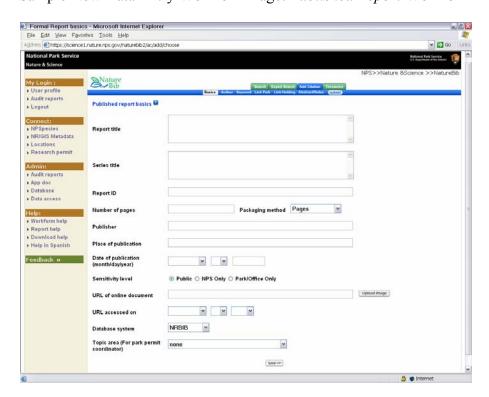
# **Appendix F: Beta NatureBib Online Application**

The following are a series of screen capture for the upcoming revised version of the NatureBib online application. The new version will eliminate the frames design of the original format and involve a multi-stage design for adding new bibliographic data. Also the *Keyword* field will include a controlled thesaurus vocabulary and the *Author* field will include a controlled names list.

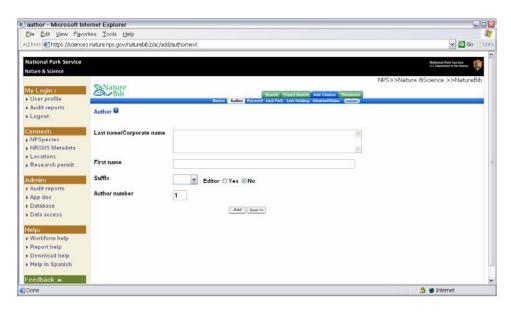


Opening Page: Add New Record-Workform Selection Screen

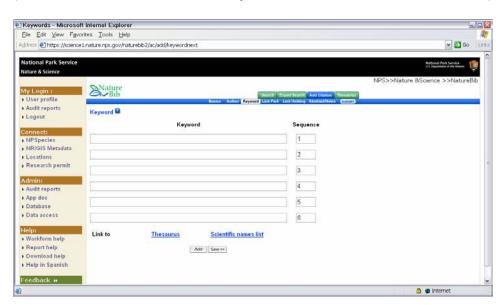
Sample New Data Entry Workform Page: Published Report Workform



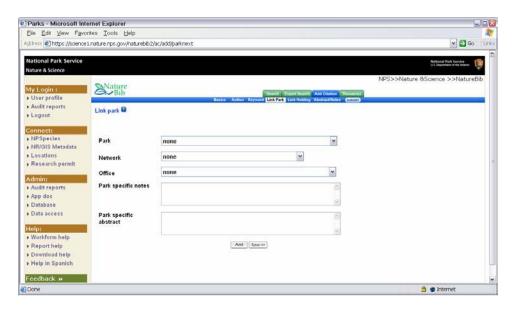
# Sample New Data Entry Page: Author Field



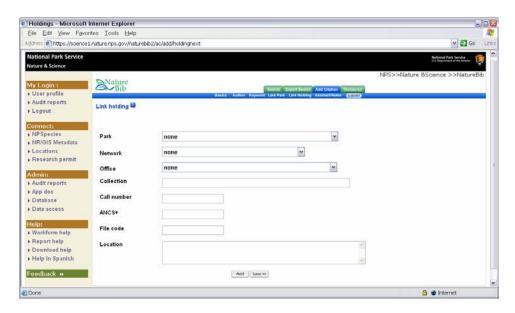
Sample New Data Entry Page: *Keyword* Field (with links to *Thesaurus* and *Scientific Names List* controlled vocabularies)



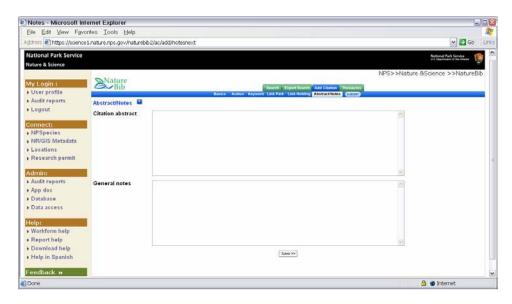
# Sample New Data Entry Page: Link Park Field



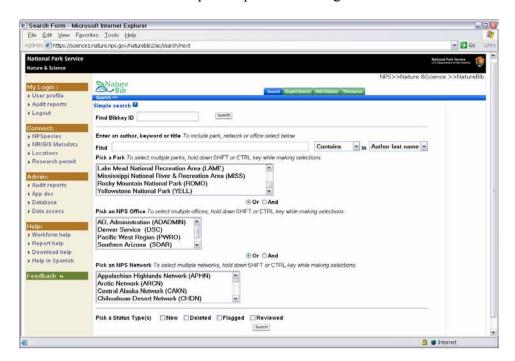
# Sample New Data Entry Page: Link Holding Field



# Sample New Data Entry Page: Abstract and Notes Fields



# Sample Simple Search Page



# Sample Advanced Search Page

